



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200

DALLAS, TX 75202-2733

JUN 15 2011

Mr. James Moore, P.E., Manager
Water Quality Assessment Section (MC-150)
Texas Commission on Environmental Quality (TCEQ)
P.O. Box 13087
Austin, TX 78711-3087

Dear Mr. Moore:

The Environmental Protection Agency (EPA) has completed its technical review of the site-specific aluminum criterion, which was submitted to EPA for review and approval. The site-specific criterion applies to Lake Stryker. According to §307.4(h)(3) of the 2000 *Texas Surface Water Quality Standards* (TX WQS), Lake Stryker is an unclassified water body with a high quality aquatic life use. EPA guidance allows states to develop site-specific criteria for waters for which default water quality criteria may not be appropriate.

Under Texas Pollutant Discharge Elimination System (TPDES) Permit No. 00946 (NPDES TX0001066), the Luminant Steam Electric facility is authorized to treat and discharge wastewater to Lake Stryker (within segment 0611 of the Neches River Basin). A water effects ratio (WER) study was performed using laboratory water and a composite sample collected from four sites to determine if a site-specific water quality criterion for aluminum would be more appropriate than the statewide aluminum criterion. Our review of the final WER study indicates that the statewide water quality criterion for aluminum may be adjusted to account for site-specific physical and chemical interactions which mitigate the toxicity of aluminum to aquatic organisms. The methodology used to determine the site-specific criterion is consistent with EPA's 1994 WER guidance for metals and with the previously-approved WER provision in §307.6(c)(9) of the TX WQS. From the study, a final WER of 3.7 for aluminum was calculated from the geometric mean of four individual WERs derived from toxicity tests conducted with *Ceriodaphnia dubia*.

Based on the 2000 TX WQS criteria for aluminum and the resulting dissolved WER of 3.7, EPA has determined that a site-specific freshwater acute water quality criterion of 3667 µg/L µg/L is approvable. However, in order for EPA to take a formal approval action under §303(c) of the Clean Water Act, fulfillment of the public participation requirements found at 40 CFR Part 25 for this site-specific water quality standards revision is necessary. In order to fulfill these requirements and to complete TCEQ's water quality standards submission, we request that TCEQ submit to EPA a copy of the public notice for this site-specific water quality standards revision, along with any comments received during the public comment period (or documentation that no comments were received). The public participation process may be completed through the permit application process, as noted in §307.6(c)(9) of the TX WQS.

If you should have any questions, please call me at (214) 665-6644 or have your staff contact Diane Evans at (214) 665-6677.

Sincerely,

for

Philip A. Crocker
Chief

Watershed Management Section (6WQ-EW)

cc: Michael Pfeil, TCEQ - Water Quality Assessment Section (MC-150)
Debbie Miller, TCEQ - Standards Group (MC-234)